

Claims:

1. A fluid line connector assembly comprising:
 - a length of flexible tubing having a tubing end;
 - a first fitting body received on said tubing end;
 - a second fitting body secured to said first fitting body, at least one of said first fitting body and said second fitting body forming a fluid-tight connection with said tubing end;
 - a third fitting body rotatably supported on said second fitting body; and,
 - a sealing member forming a fluid-tight seal between said second fitting body and said third fitting body.
2. A fluid line connector assembly according to claim 1, wherein said second fitting body includes an inwardly extending groove.
3. A fluid line connector assembly according to claim 2, wherein said third fitting body includes an outwardly extending groove in substantial alignment with said inwardly extending groove of said second fitting body.
4. A fluid line connector assembly according to claim 3 further comprising a retaining member at least partially received within a portion of each of said inwardly extending groove and said outwardly extending groove.
5. A fluid line connector assembly according to claim 1, wherein said sealing member is compressively positioned between said second fitting body and said third fitting body.
6. A fluid line connector assembly according to claim 5, wherein said sealing member is an o-ring.
7. A fluid line connector assembly according to claim 1, wherein said tubing end includes an outwardly extending flared portion, and said flared portion is positioned between said first fitting body and said second fitting body.

8. A fluid line connector assembly according to claim 7, wherein said first fitting body has an inside wall that includes a plurality of threads, and said second fitting body has an outside wall that includes a plurality of corresponding threads, said second fitting body is secured to said first fitting body by interengaging said threads.
9. A fluid line connector assembly according to claim 7, wherein said second fitting body is secured to said first fitting body by a welded joint.
10. A fluid line connector assembly according to claim 7, wherein at least one of said first fitting body and said second fitting body includes a flare-engaging surface in abutting engagement with said flared portion of said tubing end.
11. A fluid line connector assembly according to claim 10, wherein each of said first fitting body and said second fitting body includes a flare-engaging surface, and said flared portion of said tubing end is compressively positioned between said flare engaging surfaces.
12. A fluid line connector assembly according to claim 1 further comprising a sheath extending along at least a portion the exterior of said length of tubing.
13. A fluid line connector assembly according to claim 12 further comprising a polymeric coating extending along at least a portion of said sheath.
14. A fluid line connector assembly according to claim 1, wherein said length of flexible tubing includes a plurality of corrugations.
15. A fluid line connector assembly according to claim 14, wherein said first fitting body includes an annular rib engaging one of said plurality of corrugations.
16. A fluid line connector assembly according to claim 15 further comprising a fourth fitting body extending between said first fitting body and said second fitting body.

17. A fluid line connector assembly according to claim 16, wherein said fourth fitting body includes a radially inwardly extending flange portion engaging a wall of said first fitting body and a threaded portion engaging a corresponding threaded portion of said second fitting body.
18. A fluid line connector assembly comprising:
a length of flexible tubing having a tubing end;
a first fitting body received on said tubing end;
a second fitting body rotatably supported on said first fitting body; and,
a sealing member forming a fluid-tight seal between said tubing end and one of said first fitting body and said second fitting body.
19. A fluid line connector assembly according to claim 18, wherein said second fitting body includes an inwardly extending groove.
20. A fluid line connector assembly according to claim 19, wherein said sealing member is an o-ring at least partially received in said groove.
21. A fluid line connector assembly according to claim 19, wherein said first fitting body includes an outwardly extending groove in substantial alignment with said inwardly extending groove on said second fitting body.
22. A fluid line connector assembly according to claim 21 further comprising a retaining member at least partially received within a portion of each of said grooves.
23. A fluid line connector assembly comprising:
a length of flexible tubing having a tubing end;
a first fitting body received on said tubing end;
a second fitting body secured to said first fitting body, at least one of said first fitting body and said second fitting body at least partially forming a compression seal along said tubing end;
a third fitting body rotatably supported on said second fitting body; and,
a sealing member forming a fluid-tight seal between said second fitting body and said third fitting body.

24. A fluid line connector assembly according to claim 23, wherein one of said first and second fitting bodies includes a substantially frustoconical wall, and the other of said first and second fitting bodies includes a compression wall in abutting engagement with said substantially frustoconical wall.
25. A fluid line connector assembly according to claim 23, wherein said second fitting body includes an inwardly extending groove.
26. A fluid line connector assembly according to claim 25, wherein said sealing member is an o-ring at least partially received in said groove.
27. A fluid line connector assembly according to claim 25, wherein said first fitting body includes an outwardly extending groove in substantial alignment with said inwardly extending groove on said second fitting body.
28. A fluid line connector assembly according to claim 27 further comprising a retaining member at least partially received within a portion of each of said grooves.
29. A fluid line connector assembly comprising:
a length of flexible tubing having a tubing end;
a first fitting body received on said tubing end;
a second fitting body secured to said first fitting body;
a compression ring captured on said tubing end between said first and second fitting bodies, said compression ring at least partially forming a compression seal along said tubing end;
a third fitting body rotatably supported on said second fitting body; and,
a sealing member forming a fluid-tight seal between said second fitting body and said third fitting body.
30. A fluid line connector assembly according to claim 29, wherein said compression ring includes a substantially frustoconical wall and at least one of said first and second fitting bodies includes a compression wall in abutting engagement with said substantially frustoconical wall.

31. A fluid line connector assembly according to claim 30, wherein said compression ring includes two opposing, substantially frustoconical walls and each of said first and second fitting bodies includes a compression wall in abutting engagement with a different one of said substantially frustoconical wall.

32. A method of assembling a fluid line connector assembly comprising steps of:

- a) providing a length of flexible tubing having a tubing end, a first fitting body, a second fitting body having an inwardly extending groove, a third fitting body having an outwardly extending groove, a sealing member and a retaining member;
- b) positioning said first fitting body on said tubing end;
- c) securing said second fitting body on said first fitting body and forming a fluid-tight seal between one of said first and second fitting bodies and said tubing end;
- d) positioning said sealing member on said second fitting body and said retaining member within at least a portion of said inwardly extending groove; and,
- e) positioning said third fitting body on said second fitting body such that said retaining member is received within at least a portion of said outwardly extending groove and said sealing member is compressively positioned between said second and third fitting bodies.

33. A method according to claim 32, wherein each of said first and second fitting bodies include a corresponding first and second plurality of threads, and step c) includes interengaging said threads to secure said second fitting body on said first fitting body.